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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,933

06/13/2005

Jan Koek

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34375 7590 05/29/2007  
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EXAMINER

DESAI, RITA J

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

05/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,933	<b>Applicant(s)</b> KOEK ET AL.	
	<b>Examiner</b> Rita J. Desai	<b>Art Unit</b> 1625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/6/05</u> . | 6) <input type="checkbox"/> Other: ____  |

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### DETAILED ACTION

Claims pending 1-8.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

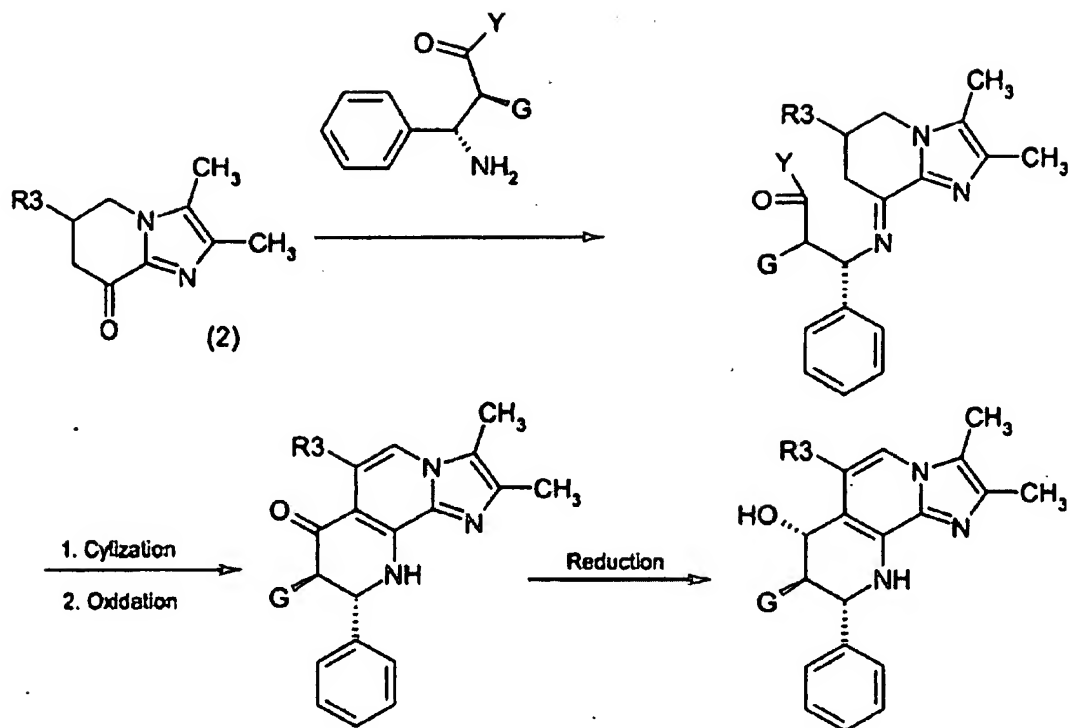
Claims 1-6, are rejected under 35 U.S.C. 102(b) as being anticipated by

WO 01/72756 Simon Wolfgang et al.

The reference discloses the intermediate on page 22 , scheme 2, of the formula corresponding to the compounds of the invention when R1 is a CH3 and .

The definition of G is given as a suitable silyl radical, and on page 20 the trimethylsilyl as a suitable silyl protecting group is also taught.

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Y is again a suitable leaving group, for example a methoxy group. The group G - depending on whether a compound where R<sup>5a</sup> and R<sup>5b</sup> = hydrogen or whether a compound R<sup>5a</sup> or R<sup>5b</sup> = hydroxyl is desired - is either hydrogen or a hydroxyl group (for example protected by a suitable silyl radical).

The limitations of claim 6 wherein the process uses formula 2 and 3 is also taught in the scheme 2.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 0172754 .

Wolfgang et al.

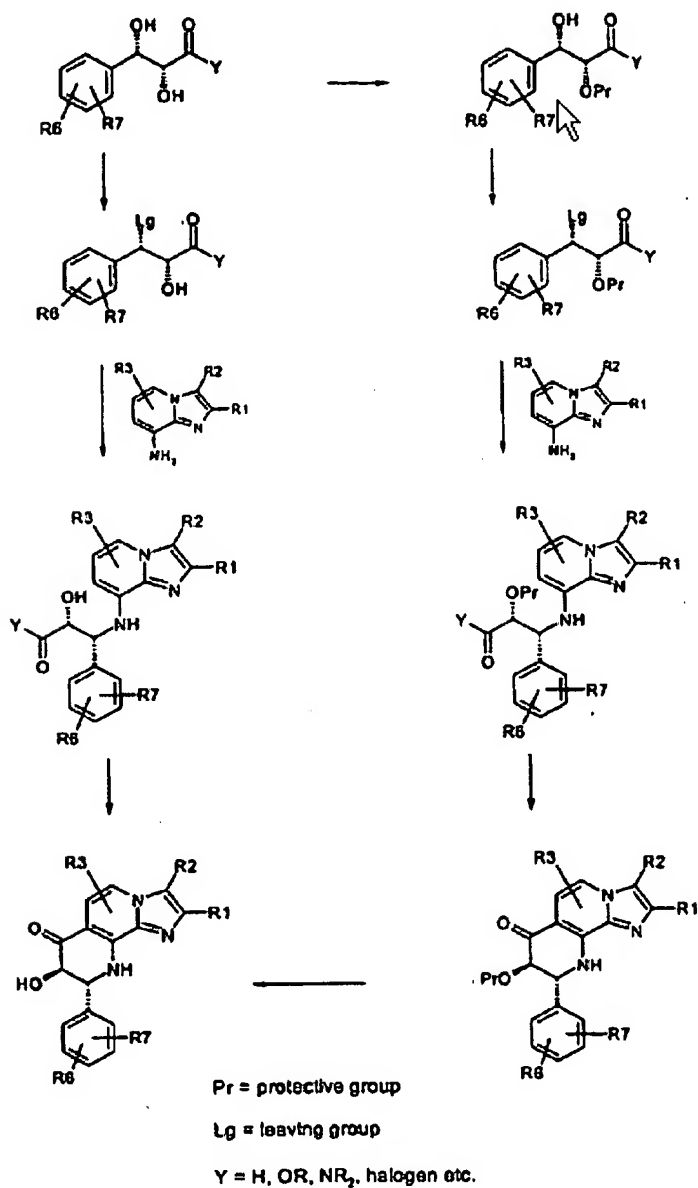
The reference is similar to the WO 01/72756 and discloses essentially the same process.

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Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/42707

Simon Wofgang et al.

The process is clearly disclosed in scheme 6 on page 14 of the reference. It is given below for easy reference.



The same reagents and process is shown.

***Claim Rejections - 35 USC § 103***

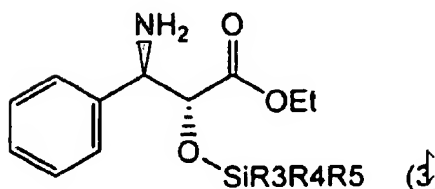
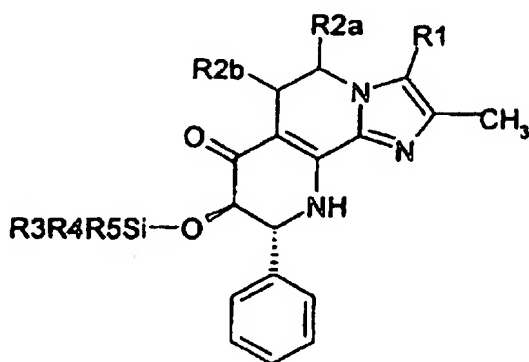
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO

01/72756 Simon Wolfgang et al. (and also WO 0172754 )

Applicants claims are drawn to compounds , intermediates and a process of making compound 4 or a process of using the intermediates of the formula



Determination of the scope and content of the prior art (MPEP §2141.01)

As given in the above rejection the process using the Silyl protected O compound to make the compounds 4 are given.

1) The reference teaches the equivalence of the X being an O or N compounds of formula I\*. The process of preparing the compounds with the O is shown in scheme I, It teaches the removal of the protective group and cyclization to make the final product. Scheme 2 just shows the product with the protective group.

2) The Y group of the reference is a leaving group and an example of methoxy is given. The current claims have ethoxy in the same position.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

1) the equivalence of the X position and with the same OH and =O group formed, one of skill in the art would have found it obvious that to make the OH the O would first be protected and then after cyclization be deprotected to obtain the hydroxyl substituent.

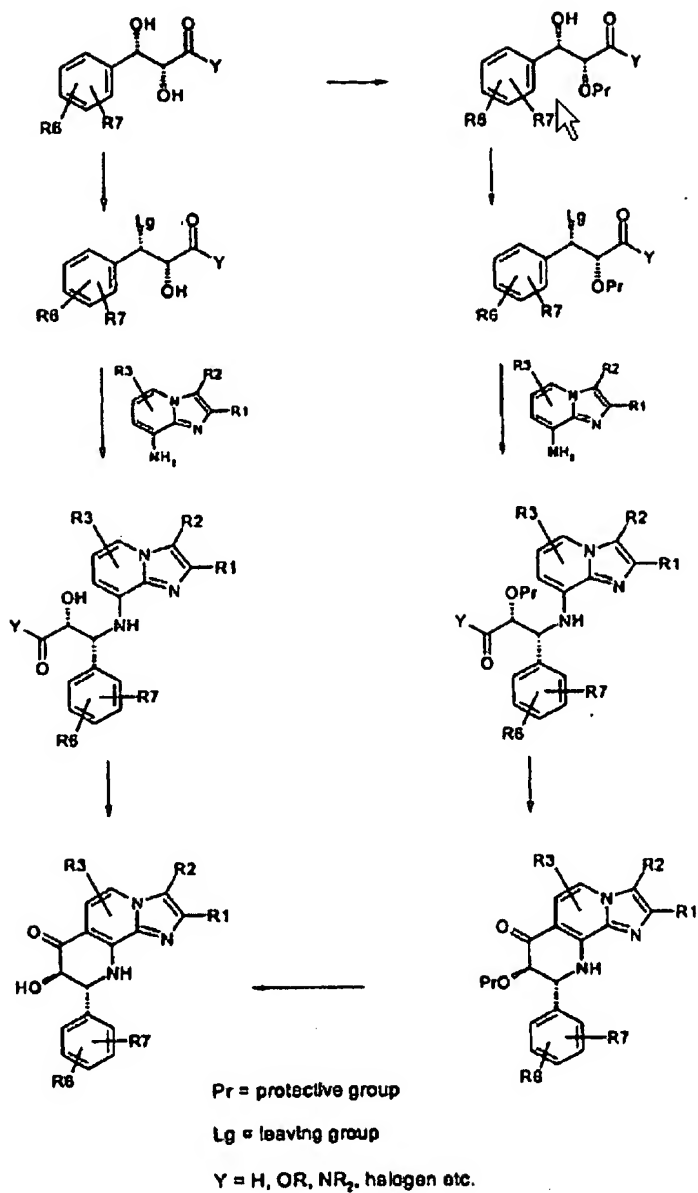
2) The reference clearly teaches the same process, using an ethoxy instead of a methoxy would be obvious to one skill in the art as they both are lower alkyls and have the same properties.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/42707 Simon Wolfgang et al.

Please see above rejections for the claimed invention.

Determination of the scope and content of the prior art (MPEP §2141.01)

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The reference teaches the scheme of making the compounds of the instant application.

The intermediates are also taught.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The scheme is taught, however the names of the protective groups are not mentioned.

Also the leaving groups are not mentioned.



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Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

One skilled in the art of synthesizing compounds and would know that Silyl protective groups for O is very commonly used and also that if methoxy is a leaving group, and alsoxy would also behave in the same way.

Thus they would be motivated to use the silyl protective group and also use ethoxy instead of methoxy in the process, as its leaving group Lg.

### ***Conclusion***

Claims 1-8 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita J. Desai whose telephone number is 571-272-0684. The examiner can normally be reached on Monday - Friday, flex time..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rita J. Desai  
Primary Examiner  
Art Unit 1625

*RJ Desai*  
5/25/07

R.D.  
May 24, 2007